

REMARKS

Claims 21-33 are pending in the application. Applicants thank Examiner Tungaturthi for the courtesy extended to Applicant's representative during the interview of December 27, 2007. During the interview, the §112 art based rejections were discussed.

BACKGROUND

ABP-1 (angiostatin binding protein-1, SEQ ID NO: 2) is a protein with a region (Big-3, shown in SEQ ID NO: 4) that has the ability to bind a fragment of plasminogen such as the first four Kringle domains. Such a fragment of plasminogen is called angiostatin and it exhibits activity against angiogenesis. Experiments have demonstrated that ABP-1 plays a role in mediating angiostatin's signaling pathways, and consequently its anti-angiogenic activity, by acting as a receptor to angiostatin.

Having identified ABP-1, the invention encompasses variants of ABP-1 and its homologs and fragments that have the same angiostatin-binding activity as ABP-1. Such variants, homologs and fragments are readily identifiable according to conventional methods of protein synthesis and assays, coupled with the working examples disclosed in the specification, as discussed in detail below.

The invention further encompasses antibodies to ABP-1, which can also be identified and assayed according to conventional methods and assays, coupled with the working examples disclosed in the specification. Such antibodies are useful, for example, in immunoassays and medicaments.

Objections of the Disclosure

The Examiner has objected to the specification because the first line of the specification is not updated to incorporate the US Patent number of the parent application 09/332,063. Applicants have amended the specification to specify US patent number 6,908,898.

Rejections under 35 U.S.C. § 112, ¶ 1 (Written Description and Enablement)

The Examiner has rejected claims 21, 23-26 and 28-32 as not being adequately described in the specification in such a way as to convey to one skilled in the art, at the time the application was filed, that Applicants had possession of the claimed invention. According to the Examiner, the specification as filed does not provide adequate written description support for an antibody to a polypeptide having at least 80% sequence identity to SEQ ID 2, 3 or 4. According to the Examiner, polypeptides having diverse functions are encompassed by the phrase 80% homology.

The Examiner has rejected claims 21, 23-26 and 28-32 as not enabling one skilled in the art to make and use the claimed invention according to 35 U.S.C. § 112, paragraph 1. The Examiner alleges that the specification, while being enabling for an antibody or antibody fragment that binds to a protein comprising an amino acid sequence as set forth in SEQ ID NOS: 2, 3 or 4, is not enabling for a peptide having at least 80% sequence identify to SEQ ID NOS: 2 and 4 or a peptide having at least 10 contiguous amino acid residues of SEQ ID NO: 2.

During the telephonic interview conducted with the Examiner on December 27, 2007, the Examiner indicated that amendment of the pending claims to encompass antibodies that bind to a polypeptide having 98% homology, rather than 80% homology, to SEQ ID NOS 4 would in all likelihood put the claims in condition for allowance. Applicants have amended claim 21 to specify 98% homology rather than 80%. This amendment is supported at page 2, paragraph 25, of the specification. It should be noted that claim 23, which recites 80% homology to SEQ ID NOS 2 or 3, is dependent on claim 21 which the Examiner has indicated would be in condition for allowance if amended to recite 98% homology. Further, claim 24 is dependent on claim 22, which simply recites that the protein comprises SEQ ID No:4.

Additionally, the Examiner suggested that claims 31 and 32 be amended to specify specific stringent hybridization conditions. Applicants have amended said claims to specify specific stringent conditions. These amendments are supported at page 2, paragraph 26, of the specification.

Applicants submit that, given the teachings of the specification of both structural and functional features of the anti-angiogenic proteins encompassed by the claims as amended, a sufficient written description and enablement has been provided. Therefore, Applicants respectfully request withdrawal of the rejections of these and all pending claims under 35 U.S.C. § 112, first paragraph.

CONCLUSION

It is respectfully submitted that the present application is now in condition for allowance, which action is respectfully requested. The Examiner is invited to contact Applicants' representative to discuss any issue that would expedite allowance of the subject application.

Any fees for extension(s) of time or additional fees that are required in connection with the filing of this response are hereby petitioned under 37 C.F.R. § 1.136(a), and the Commissioner is authorized to charge any such required fees or to credit any overpayment to Kenyon & Kenyon LLP Deposit Account No. 11-0600.

Respectfully submitted,

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